

ABSTRACT

An object of the present invention is to provide a method for production of metallic powder in which aggregation of particles and growth to secondary particle after reducing process of the metallic powder particle can be prevented, to reliably obtain metallic particles containing few coarse particles and to meet requirements of thinner layer and greater number of layers in recent capacitors, and a production device therefor. The present invention includes a reducing process in which metal chloride gas and reducing gas are contacted to continuously reduce the metal chloride, and a cooling process in which a gas containing metallic powder generated in the reducing process is continuously cooled by inert gas. In the cooling process, a vortex flow is generated by blowing out the inert gas from at least one part around the flowing passage of the metallic powder. Furthermore, during the production of the metallic powder, inert gas flow is generated in the vertical direction along the inner wall of the production device (reducing process and cooling process) continuously. Aggregation of the metallic powder and growth of secondary particles can be reduced to reliably obtain metallic powder having uniform particle size containing few coarse particles.